



SPI Serial Flash

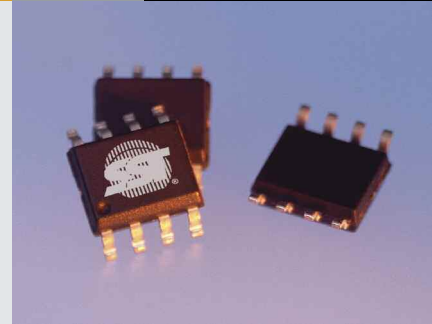
25 Series

Product Brief
April 2007

Product Description

SPI Serial Flash is small, low-power flash memory that features Serial Peripheral Interface (SPI) and pin-for-pin compatibility with industry-standard SPI EEPROM devices. Its small footprint reduces ASIC controller pin-count and packaging costs, saves board space, and keeps system costs down. Lower power consumption than standard flash and fewer wires than parallel flash; SPI Serial Flash is the ideal cost-efficient, data transfer solution.

The ever growing 25 Series family now includes an 8-bump XFBGA Z-Scale™ package for enhanced reliability and performance in an even smaller size; and an ultra-low power Serial Flash for battery operated applications.



Key Features

Serial Interface Architecture: Mode 0 and Mode 3

Small Footprint

- 8-lead SOIC
- Low profile 8-contact WSON
- NEW: 8-bump XFBGA Z-Scale

Operating Voltage

- 2.7V-3.6V
- 3.0V-3.6V
- 1.65V-1.95V

Clock Frequency

- Up to 66 MHz maximum

Flexible Erase Capability

- 4 KByte uniform Sector-Erase
- 32/64 KByte Block-Erase
- Chip-Erase

AAI Programming

- Auto Address Increment for fast production throughput

Proven Technology

- CMOS SuperFlash® technology boosts data retention and endurance, reduces erase time and power consumption, making SST serial flash ideal for portable designs
- Endurance 100,000 cycles (typical)
- Greater than 100 years data retention
- Fast Sector-Erase or Block-Erase time: 18 ms (typical)
- Byte Program time: 7 µA (typical)
- Active Read Current: 10 mA (typical)
- Standby Current: 5 µA (typical)

NEW to the 25 Series Family

Low Power Serial Flash for Battery Operated Applications

- 1.65V-1.95V Operating Range
- 512 Kbit through 16 Mbit densities
- Ultra Low-Power Consumption
- Active Read Current less than 9 mA
- Standby Current less than 2 µA



Applications

- HD DVD
- HDTV
- Bluetooth
- MP3 players
- DSL and cable modems
- Optical disk drives
- Hard disk drives
- PC BIOS
- Printers
- Zigbee
- Wireless LAN
- Set-top boxes
- LCD monitors
- Digital radios
- And many more

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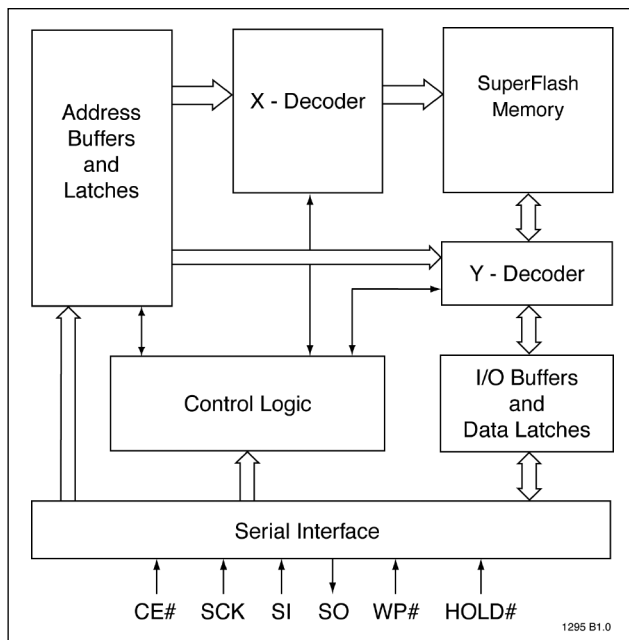
www.SST.com
www.SuperFlash.com

Serial Flash, 3.0V				
Device	Density	Voltage	Clock Speed (MHz)	Packages
SST25VF512A	512 Kb (64Kx8)	2.7-3.6V	33	SOIC-8 (150mil), WSON-8, XFBGA-8
SST25VF010A	1 Mb (128Kx8)	2.7-3.6V	33	SOIC-8 (150mil), WSON-8, XFBGA-8
SST25LF020A	2 Mb (256Kx8)	3.0-3.6V	33	SOIC-8 (150mil), WSON-8, XFBGA-8
SST25VF040B	4 Mb (512Kx8)	2.7-3.6V	50/66*	SOIC-8 (150mil), SOIC-8 (200mil) WSON-8, XFBGA-8
SST25VF080B	8 Mb (1Mx8)	2.7-3.6V	50/66*	SOIC-8 (200mil), WSON-8, XFBGA-8
SST25VF016B	16 Mb (2Mx8)	2.7-3.6V	50/66*	SOIC-8 (200mil), WSON-8, XFBGA-8

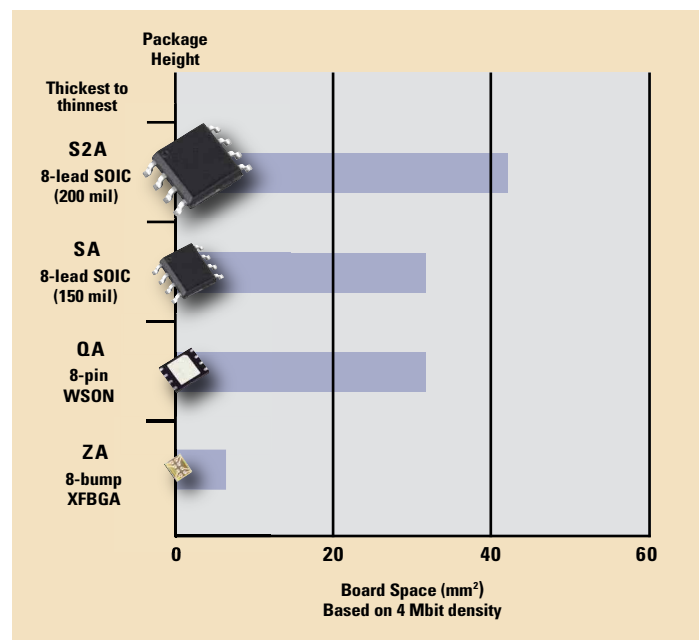
*3.0V-3.6V Operating Voltage

Serial Flash, 1.8V				
Device	Density	Voltage	Clock Speed (MHz)	Packages
SST25WF512	512 Kb (64Kx8)	1.65-1.95V	40	SOIC-8 (150mil), XFBGA-8
SST25WF010	1 Mb (128Kx8)	1.65-1.95V	40	SOIC-8 (150mil), XFBGA-8
SST25WF020	2 Mb (256Kx8)	1.65-1.95V	40	SOIC-8 (150mil), XFBGA-8
SST25WF040	4 Mb (512Kx8)	1.65-1.95V	40	SOIC-8 (150mil), XFBGA-8
SST25WF080	8 Mb (1Mx8)	1.65-1.95V	40	SOIC-8 (150mil), XFBGA-8
SST25WF016	16 Mb (2Mx8)	1.65-1.95V	40	SOIC-8 (150mil), XFBGA-8

25 Series Block Diagram



SST Serial Flash Packages



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For more information please contact your local SST Sales Representative. See the "Sales" page of www.SST.com for complete listings.

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